



# AABR NEWS

Australian Association of Bush Regenerators  
*working with natural processes*

**Nº 138**  
**October**  
**2018**

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## AABR Guest Speaker and Annual General Meeting

**Saturday 17th November 2018**

**Where: Maiden Theatre at the Royal Botanic Gardens**

**Time: 10am-12 noon**

Join us for a talk and AABR's Annual General Meeting (aka Awesome Get-together with Mates).

**For this year's AGM, AABR has secured guest speaker Maurizio Rossetto, PhD, Senior Principal Research Scientist, Manager Evolutionary Ecology (National Herbarium of NSW) & Honorary Professor (The University of Queensland).**

Would you like to join the committee and help AABR; talk to our President, Tein McDonald. email [president@aabr.org.au](mailto:president@aabr.org.au) - see Page 12.

After the AGM, socialising and a BYO picnic are planned. Bring something to share for a bush regen buffet.

How to get there: <https://www.rbg Syd.nsw.gov.au/visit>

### What's on at the Botanic Gardens

If you'd like to make it a family affair there are activities on whilst the AABR AGM is in action to entertain your partner and progeny - an exhibition, Plants with Bite, and a Sustainable Living: Introduction to Foraging Garden Walk. See the RBGS What's On for bookings

<https://www.rbg Syd.nsw.gov.au/whatson>



# President's Perspective

Hi all,

All the interesting events advertised in the July newsletter have come to pass, as you can see from reports in this issue.

**Ambrose Crawford commemoration.** AABR joined with Big Scrub Landcare (BSL) and the Society for Ecological Restoration Australasia (SERA) in a short ceremony marking Ambrose's contribution to rainforest restoration, by leading (starting in 1935) one of the earliest ecological restoration projects in the world. Ambrose maintained an active stewardship role for 40 years, before management was taken on by Ballina Shire Council and more recently, Big Scrub Landcare. (See story p. 4.)

**Big Scrub field trip.** This was part of a very successful weekend organised by AABR, SERA and BSL as a pre-conference field trip prior to the SERA biennial conference, in Brisbane. The main field trip that looked in depth at six high profile rainforest restoration sites in the Big Scrub area, introduced in a sequence that told the story of the last 40 years of work to regenerate and expand remnants and restore connectivity in this cleared agricultural landscape. At the last site, the property of BSL President Tony Parkes and his wife Rowena, we learned about BSL's project to establish a seed production area to supply genetically appropriate plant material to Landcare sites (a topic we will hear more about from our Guest Speaker, Maurizio Rossetto at the upcoming AGM!). The field trip was attended by 30 visitors on

Day 1 and 26 on Day 2 and involved a total of 18 guides/hosts plus other community members.

**AABR bus trip.** Eight of the 30 attendees drove up from Sydney on a small bus chartered by AABR and driven by our trusty ex-regenerator professional driver Graeme Steer – and that group was lucky enough to also attend site visits to Wingham Brush (led by Dr John Stockard) and Coramba Nature Reserve near Coffs Harbour (led by AABR member Kris Hely) – see stories of both on pages 5-7.

Those who missed out will be able to take the 'virtual' field trips of all sites visited, once we have edited all the footage taken by the **RegenTV** film crew!

**The Albert Morris Award** was judged again this year, with the awards presented at the SERA conference dinner. The very deserving winner of the Award is the federally funded program to restore or rehabilitate 13,000 ha of Murray and Riverina LLS Travelling Stock Routes and Reserves – bringing back biodiversity in the Riverina. (See story about this and other award winning projects on p. 3).

Happy reading and see you at the AABR AGM!

Tein McDonald  
President AABR

## RegenTV at SERA 2018



The *regenTV* team headed off to Brisbane for the SERA 2018 conference held in September where presentations –a-plenty were recorded for posterity.

A trade table adorned with new banner and *regenTV* shirts provided for a point of contact to talk to delegates about the scope and sponsorship opportunities of *regenTV*, the benefits of accreditation and to explore collaboration on hosting events.

The *regenTV* team managed to record over 38 speakers thanks to the exceptional coordination of Virginia Bear and the adept handling of new camera recruits Jane Gye and Louise Brodie.

In addition to recording speakers, a *regenTV* presentation was delivered by Virginia and Louise, sharing the *regenTV* process and opportunities that high quality video content can leverage.

Louise, Virginia and Jane. Members of the *regenTV* team adorned in the new T-shirts, at the 2018 SERA conference..



The Environmental Trust grant that has supported the piloting of *regenTV* will be completed in February 2019 and AABR is keen to continue to grow the collection of case studies on offer.

A 2017 article from *Forbes CommunityVoice* outlines how video content is considered the king of the online media at present, having the capacity to not only bring more organic traffic to a website but also aid in converting visitors to customers. It's also being shown that viewers retain information better than readers and also people just love watching videos, especially how-to and explainers.

This bodes well for *regenTV* as AABR looks to develop a sponsorship model to support the ongoing production of high quality informative and educational videos.

If you or your organization would like to sponsor a *regenTV* video please get in touch with Suzanne at [education@aabr.org.au](mailto:education@aabr.org.au) as we move to create a community model to sustain *regenTV* into the future.

### Welcome to new AABR Members

Kate Augl	David Manning
Darren Close	Adrian O'Hara
Matthew Doherty	Marc Oltramare
Tony Gilson	Paul Revie
David Khoury	Tiffany Stitt
Richard Lloyd	

# AWARDS, AWARDS, AWARDS!!

## Albert Morris Award

The Albert Morris Award 2018 was presented to the Murray Riverina Travelling Stock Reserves project, NSW Australia.

This award commemorates the visionary work led by Albert Morris in creating the Broken Hill Regeneration reserves, commencing in 1936 and is given for **an outstanding ecological restoration project**. It was presented at the recent SERA (Society for Ecological Restoration Australasia) conference dinner in Brisbane on the 27<sup>th</sup> of September, 2018.

The Albert Morris Award recipient was selected by the Albert Morris Award Committee with representatives from the four initiating Partner organisations, being AABR, Greening Australia, SERA and ANPC (Australian Network for Plant Conservation). The Convenor of the Award, Dr Tein McDonald commented that "The project particularly inspired the judges with its brilliant application of ecologically attuned grazing to improve the condition of native ecosystems. This makes it a highly fitting model for other public and private landholders who want to maintain and improve their native pastures and ecosystems rather than have them degrade over time."

The Murray Riverina TSRs project bears many of the hallmarks of the work in Broken Hill in the 1930s led by Albert Morris, after whom the award is named – as it has a similarly high relevance to conserving and renewing the native vegetation of regional Australia upon which we depend. In the case of the Riverina TSRs, the motivation has been and remains to renew the native vegetation for not only native fauna habitat but also to retain potential for managed grazing.

The outstanding results of the project, which was supported by

the Biodiversity Fund of the Australian Government, are largely due to the TSR rangers allowing grazing when weed was growing but prior to its seeding, allowing a shift to more productive native pastures and recovery of other natives. Grazing thereby provided the main tool for renewing the ecosystems. The project also involved substantial seeding of native shrubs to improve habitats for declining woodland birds, many of which the project's monitoring has found returning slowly but surely.

The trophy was presented to Gary Rodda, General Manager of the Murray Local Land Services. Citations were given to TSR rangers Peter O'Shannassy, Stuart Watson, Roger Harris and Reg Eade and to field ecologist Ian Davidson (who worked with Peter O'Shannassy to design the project and provide the ecological backing).

Enquiries: [info@albertmorrisaward.org](mailto:info@albertmorrisaward.org)

Tein McDonald 0458 565 654



Gary Rodda receives the Albert Morris Award 2018 on behalf of the Murray Local Land Services from Tein McDonald from the award committee.

## Green Globe Awards

AABR was very proud to have our president Tein McDonald as a finalist in the recently awarded Green Globe awards 2018.

Tein was in the category for Sustainability Champion Award. People in this category are leaders in influencing and facilitating change through delivering environmental projects.

Bush regeneration was recognised with the Lord Howe Island Weed Eradication Project being a joint winner in the natural environment category, and the winner of the regional projects.



Hank Bower from Lord Howe Island (left) and Mark Bachmann from Nature Glenelg Trust (right) receiving SERA awards from Kingsley Dixon and Tein McDonald from SERA

## SERA awards

The SERA awards for ecological restoration projects were also presented at the SERA dinner.

The SERA award for Excellence in Ecological Restoration (Projects above 50ha) was shared by two projects both of which are featured on regenTV.

Lord Howe Island's Weed Eradication Project program is one of the finest examples in the world of a community and park managers striving to attain improved health of ecosystems, and applying a holistic ecological restoration project to benefit people and nature.

Nature Glenelg Trust's work at Long Swamp, in the far south-western corner of Victoria, is a demonstration of a community working together with an NGO to restore wetland hydrology across a 15km long wetland, reinstating this important site's wetland plants and animals.

The winner of the 'below 50ha' category, EnviTE's Stage 1 Wampoo Gorge in northern NSW, is an outstanding example of assisted natural regeneration work in a corridor linking to major natural areas. The site was previously cleared for farming and has now been purchased by NSW NPWS.

# AABR Journeys!

## AABR Bus trip to Bug Scrub, Lismore 2018

The morning of Thursday 20th September saw a group of AABR members and friends climb aboard the bus and set off northwards for the 6 day trip north from Sydney to Lismore and back. Others went in their own vehicles.

Whilst the visit was mainly centred on visiting bush regeneration sites in the Big Scrub near Lismore and Alstonville in north east NSW, the bus stopped to visit Wingham Brush on the way up and Coramba Nature Reserve, near Coffs Harbour, on the way back.

At Lismore we joined up with participants from the Society for Ecological Restoration Australasia (SERA) Conference for the two day conference field trip to see remnants of the Big Scrub and hear about work done on these sites.

Articles about the visits to Wingham Brush and Coramba are in this issue of Bush Matters, and next newsletter will have stories about the visit to the Big Scrub sites.

A number of AABR members continued to the SERA conference in Brisbane and AABR made a presentation on our *regenTV* project.

Of course, everyone had a great time seeing so many interesting sites, meeting other regenerators and socialising.

Congratulations to Tein McDonald who carried out the majority of the organisation.



## Celebration at Lumley Park

Honouring the work of restoration pioneer Ambrose Crawford – Lumley Park 2018

On Saturday 22<sup>nd</sup> September, State Member for Ballina, the Hon. Tamara Smith presented a framed commemorative photo to Stan Dudgeon, grandson of Ambrose Crawford. The award was presented by AABR, the Society for Ecological Restoration Australasia and Big Scrub Landcare in recognition of Ambrose's role in instigating and leading the conservation and regeneration of the Lumley Park rainforest remnant.

As readers of this newsletter will be aware (see Stephanie Lymburner's article last issue [AABR Newsletter #137](#)), the Lumley Park project is likely to be the oldest 20<sup>th</sup> Century ecological restoration project in Australia if not the world, having started in 1935.

Dr. Tony Parkes, Chair of Big Scrub Landcare, praised Ambrose's vision as "ahead of its time. It wasn't until the 1970s that rainforest restoration of both private and public land in the Big Scrub country started to become an accepted activity for landholders. His legacy lives on and his commitment to the task serves as an inspiration to us all."

The presentation was attended by around 35 visiting restoration practitioners and researchers from four Australian states, China, and New Zealand – as well as members of the Alstonville Plateau Historical Society who provided a sumptuous morning tea and, with Stephanie and Julian Lymburner, a display of information on the Lumley Park restoration and garden tools used by Ambrose.



Grandson of Ambrose Stan Dudgeon (centre) flanked by cousins Ruth and Vic Faulkner, after having received the citation at Lumley Park

### Anthology of the AABR Broken Hill trip

AABR has now put together an Anthology relating to our trip, entitled *Albert Morris and the Broken Hill regeneration area. Essays and supplementary materials commemorating and celebrating the history and eightieth anniversary of this project.* It is a compilation of photographs, newsprint media and articles, both historic and new. (The anthology contains some content already published on the AABR website.)

A wonderful memento! Available as a soft cover book. As an introductory offer, we are selling them for \$20 (postage will be approx. \$8 extra). Let me, Louise, know if you would like to purchase one of these – send an email to [newsletter@aabr.org.au](mailto:newsletter@aabr.org.au)

# Coramba Nature Reserve

## AABR visit 24 September 2018

**Meron Wilson and Kris Hely**

The rich alluvial soils of the Clarence River valley coastal creeks were once covered in lowland subtropical rainforest. In 1880 nine hectares of Crown land on the north side of Orara creek, on the outskirts of Coramba (derived from the local Aboriginal name for mountain), were set aside for camping. The surrounding land was parcelled out with the injunction that it be cleared for agriculture. The land is now predominantly used for fattening cattle on introduced pastures.

The weeds that flourished in these neighbouring cleared areas swept into the reserve with every flood. In spite of this, its value as the largest remnant of the original rainforest increased. In 1982 it was declared a nature reserve and in 1989 NSW National Parks and Wildlife put a Plan of Management in place. The 2004 updated Plan, yet to be ratified, describes the reserve as 'of high conservation value as it contains one of only a few remaining stands of lowland rainforest along the Orara River'. Lowland Rainforest on floodplain is listed as an endangered ecological community under the NSW *Threatened Species Conservation Act 1995*. In a landscape context the reserve, though small and isolated, 'forms a critical part of a Regional Habitat Corridor, known as the Orara Valley Corridor, linking Bagawa/Nana Creek State Forests and Lower Bucca State Forest'.

The reserve was fenced to deter cattle and in 1999 a four year program of bush regeneration began to tackle the huge weed problems. Dense stands of large leaf privets (*Ligustrum sinense*) and camphors (*Cinnamomum camphorum*) were drilled, cats claw creeper (*Dolichandra unguis-cati*) cut and scraped; and blankets of trad (*Tradescantia fluvescens*), thigh deep in places, was treated using the standard NPWS 'mix' for problem weeds as per restoration plan (50:1 glyphosate with LI700). In 2008 they switched to 100:1 glyphosate with fulvic acid and protech oil, which has a lower toxicity and translocates better.

The western boundary was extended and planted out to protect mature yellow carabeen (*Sloanea woollsii*).

As patches of forest were relieved of their weed overburden, forest species returned in abundance. Native groundcovers and seedlings now carpet the forest floor. Red cedar (*Toona*



Kris Hely (Left) contractor in the reserve and the AABR group at Coramba Nature Reserve

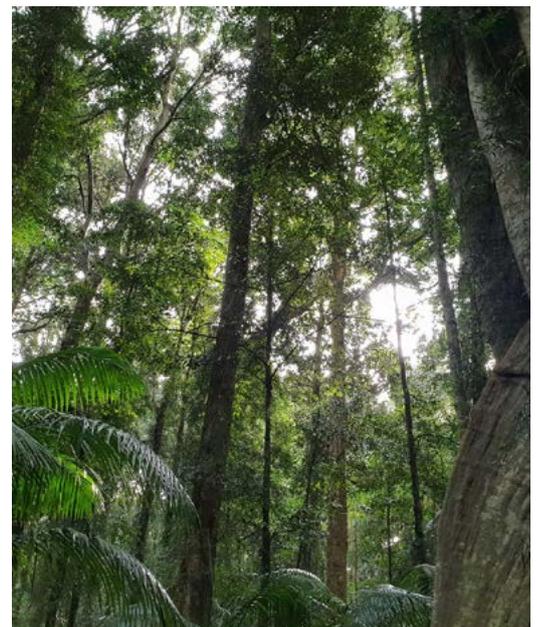
*ciliata*), giant water gum (*Syzygium francisii*) and Bangalow palms (*Archontophoenix cunninghamiana*), whose fruit are favoured by the vulnerable rose crowned fruit dove as well as other doves and pigeons, flourish. In the less disturbed areas buttresses of majestic white booyong (*Argyrodendron trifoliolatum*) covered in *Pothos longipes* vines rise out of ferny undergrowth.

The bush is maintained by a small group of dedicated volunteers and staff. Professional regenerator Kris Hely works magic with a ridiculously small budget to control weed infestations. She is supported by a staunch group of volunteers under the supervision of Lyndy Rees (from NPWS) including local legend Lloyd Foster, who has been with the group since it started.

Coramba Nature Reserve is a wonderful contrast to the grass covered flats, exposed to the elements, that surrounds it. Step inside and a whole other world envelops you. Cool, shady, and with all the intricacies of an ancient, complex vegetation community that is in constant flux.



Rainbow at Coramba Nature Reserve. Photo: K Hely



Vegetation in the reserve Photo: L Brown

# AABR Visit to Wingham Brush

## Louise Brodie

On Friday 21<sup>st</sup> September 2018, as part of the AABR trip to the North Coast, a site visit was arranged to Wingham Brush. Wingham is a little inland from Taree on the NSW mid north coast. Many of those who have studied bush regeneration will have learnt about the regeneration work at Wingham Brush.

We had around 25 friends and members of AABR on the visit. This included a contingent from Sydney and environs who had travelled by bus and car from Sydney, and people from nearby including AABR members.

We were lucky to be hosted by people who played major roles in the regeneration of Wingham Brush. This included John Stockard, who led his team in implementing a new approach and techniques to control weeds in the rainforest, Mike Dodkin formerly PSMO (Pest Species Management Officer) with NPWS and long-standing advocate for environmental weed control in the region, and Michael Thomas from NPWS who is now responsible for managing the reserve.

### Early Days

Wingham Brush is now a Nature Reserve of 9 hectares, with another 2 hectares or so yet to be dedicated. It is the sort of site where no-one would believe what it was like before regeneration work. ('You should have seen it before!' statements were simply not believed without seeing the photos!). In the early days, it was considered that the bushland here was so degraded that it would disappear within 50 years, and at that stage NPWS were not at all interested in managing the area.

John Stockard and his team started work on the site in 1980, and soon hit some challenges in respect of the methodology to be used. At that time the 'Bradley Method' was the newly accepted approach to bush regeneration. Not only was this method developed for sandstone vegetation, but an assumption had grown that it involved no herbicide use, whereas Joan Bradley, herself a chemist, recommended the team try a number of herbicides.

With a change of approach to what Stockard named *The Wingham Brush Method of Rainforest Regeneration*, the NSW Herbarium was asked to monitor the work over 5 years, and this has produced a valuable legacy with many photos of work carried out in the 1980s.



John Stockard showing the recovered rainforest in 2018. Photo: V Bear

The vegetation is primarily lowland subtropical rainforest, nearly all of which was completely cleared for agriculture, leaving only small remnants. This vegetation type is listed in NSW as an endangered ecological community being *Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions*, and listed nationally as critically endangered. The Brush is home to the grey-headed flying fox, black flying-fox since 2000 and 7 species of micro bats. Tree species include large Moreton Bay figs, the giant stinging tree, blush walnut, white cedar, black apple, shiny-leaved stinging tree, native elm, hairy rosewood and black booyong.

When the team first started work in 1980, the brush was infested with Madeira vine *Anredera cordifolia*, cats-claw creeper *Macfadyena unguis-cati*, and balloon vine *Cardiospermum grandiflorum* amongst other weeds, including *Tradescantia fluminensis*, which deeply covered the forest floor.

Dealing with these weeds initiated a canopy-oriented approach, which involved removal of the vines so that a native rainforest canopy could re-establish. Initially vines were cut and painted, but watching the aerial anredera tubers proliferate and slowly rain down on them afterwards, the team invented the 'scrape and paint' technique instead of cutting the vines. Cyclical spraying was used to control weed and vine regrowth. *Tradescantia* was left until the canopy recovered, as this prevented weeds from germinating in the interim, especially the short-lived seeds of cat's claw. Vine removal from trees and shrubs was completed by 1987.



This photo of Wingham Brush taken in 1984 is a spectacular illustration of how the brush looked at the start of the regeneration project.

Early treatment of the trees by 'skirting' can be seen. Photo: Grenville Turner



Photograph 7. October 1984. The large Giant Stinging Tree grotesquely deformed and almost devoid of leaves after it has been released from the smothering exotic vines.



Photograph 10. November 1989. The same area of the "Japanese Forest" five years later. The plants have grown, an upper canopy has formed and it is possible to walk under the small trees. The large fawn trunk towards the back right is the same Giant Stinging Tree in Photographs 7 & 8.

Photos were taken by the Royal Botanic Gardens team who monitored the work on the site.

This has provided a valuable record of work carried out and the way the vegetation responded and regenerated in the 1980s.

## The Present

Today a native canopy has been re-established, and the area has been restored with some maintenance work required. Overall this was a restoration project with natural recruitment of species and transplanted stinging tree saplings into gaps. As well, wide areas were revegetated with local propagated material, especially on the reserve boundaries and road closures.

The reserve is still subject to a number of disturbances and ongoing challenges. The site is on the flood plain so silt and weeds are brought onto the site during flood events both from the river and stormwater drains which also flush in litter. The flying foxes themselves can cause damage and there have been times when up to 450,000 little red flying fox have arrived in the reserve and severely damaged the canopy. Vandalism and a general lack of local appreciation of the reserve are considered ongoing issues. Recent aggressive pruning under insulated electricity wires has damaged vegetation unnecessarily.

A council parking area next to the reserve has been promoted for overnight camping for self-contained RV's in what is already a congested area from local usage. Other campers have also come along, with some overstaying for weeks, commonly with



their dogs entering the reserve. Timber is often collected for campfires which are lit on the reserve boundaries and campers have intruded into the. Some have used the Brush as their toilet. Fire is a major threat to rainforest communities.

Our group discussed a number of these issues, although felt that solutions lie in the community raising awareness and seeking assistance. The saying that democracy is about eternal vigilance was seen to be true!



AABR visit to Wingham Brush - the recovered rainforest 2018. Photo: V Bear.

## Further information:

A full description of the methods used can be found in the proceedings of a paper written by John J.D. Stockard *Restoration Of Wingham Brush 1980.1996. 11th Australian Weeds Conference (1996)*

This paper can be found at <http://www.caws.org.au/awc/1996/awc199614321.pdf>

Another description of work on the site is *The Regeneration of Wingham Brush, NSW* found on the AABR website at <http://www.aabr.org.au/the-regeneration-of-wingham-brush-nsw/>

# What is the best contract type for the best bush regeneration results?

Andrew McGahey of Total Earth Care Company, based in Sydney, provides further information on bush regeneration contracts in response to the letter from Scott Meier in the last [AABR Newsletter #137](#).

The best bush regeneration results come from long term planning based on comprehensive natural resources inventories.

These inventories should be backed up by sophisticated mapping software which accurately locate these resources and their current condition.

The scale of the bush regeneration effort required for long term and short term management outcomes can then be assessed.

The financial resources that are required to fulfil these outcomes can then be determined and resource use priorities established.

Long term plans of management which are written in a manner that is outcome / performance focussed (not lots of fuzzy motherhood statements) can then be used to write a tender document that can separate the wheat from the chaff.

The work effort and the results of the work effort, ie the regeneration response, can then be accurately recorded. This should be recorded using an industry standard assessment system. Contractors can then be fairly held to fulfil their contractual obligations.

The ongoing work effort required can thereby be better understood and future budgets applied to ecological outcomes of a newly assessed priority.

Both Lump Sum and Schedule of Rates contracts can support long term plans of management. I hope we all agree that short term ad-hoc plans of management are a very poor second best.

So which type of contract (Lump Sum or Schedule of Rates) better supports long term planning and more tellingly which contract type can be created without planning?

## Firstly it is important that the essential elements of a contract are understood.

1. Agreement between the parties. (There cannot be a unilateral contract.)
2. Consideration (a bargain requirement: generally, the supply of money, property or services or a promise to undertake, or not undertake a particular act in exchange for something of value).
3. Capacity to enter legal relations (e.g. of sound mind and legal age).
4. Intention by the parties to enter into legal relations (private non-commercial agreements between family members may not indicate intention to enter a legally binding contract and therefore may not be enforceable), and
5. Certainty (the contract must be complete, certain, clear and binding).

Both types of contracts require all these elements, which are expanded below.

### 1. Agreement between the parties. (There cannot be a unilateral contract.)

- This means that one party cannot force the other party to do what they want without the other party agreeing.
- It is important that the bilateral nature of the contract be understood especially by the contract manager. **HAVING A CONTRACTOR WORK FOR YOU DOES NOT MEAN THAT THE PRINCIPAL HAS THE POWER TO FORCE THE CONTRACTOR INTO DOING WORK THAT HAS NOT BEEN SPECIFICALLY COVERED IN THE CONTRACT.** I have had many examples where my contract supervisors have explained that the client has forced them into doing work which they thought was unethical, technically incorrect or beyond the scope of the contract.
- It has been inferred at best and plainly stated at worst by past clients that if the supervisors did not do what was demanded, they would lose the contract. A good contract manager obviously understands that this coercive pressure is unethical and contractually unenforceable.
- It is also important to note that the "agreement" is not based solely on the tender specification. The negotiated contract that is ultimately signed may include variations, assumptions and exclusions made by the contractor, i.e. a counter offer.

### 2. Consideration (a bargain requirement: generally, the supply of money, property or services or a promise to undertake, or not undertake a particular act in exchange for something of value).

- Best practice must be applied where possible. Contract law qualifications, standardised reporting, terminology, GIS mapping and data analysis must be required of contractors and more importantly must be included in the skill set of the client's contract managers.
- A good contract has a clear scope of work. This may include the supply of regeneration services of an accurately mapped area, an hour of a discrete type of work or the supply and/or installation of a specific mulch, size and type of plant etc.
- The estimate of the volume/number of things to be provided should be accurate and listed in a "Bill of Quantities". A Bill of Quantities is generally included in a Lump Sum contract to clarify the work required to be performed for the Lump Sum. However, it can be applied to a Schedule of Rates contract to establish minimum quantities upon which a "Rate" can be calculated. This should be done up front by the contract manager who should allow a margin of error which can be managed using a Schedule of Rates. Although a Schedule of Rates contract does not commit the client to guarantee a minimum quantity of units of work described in the bill of quantities, it should reflect a minimum unit of work. Say 10m<sup>3</sup> of mulch. This allows the contractor to apply a rate which reflects a minimum scale /set up cost.

- Frequently a Lump sum tender specification requires the contractor to determine for themselves how many units are required. This causes the tender responses from contractors to be different and difficult to compare. It also indicates that the client is asking others to do their site assessment and cost estimates for them. A good contract manager must do their own estimates to be professionally certain of what they are managing, they should not rely on the estimates of contractors. In fact, they should use their own estimates as a tool to judge the quantity surveying skills of the tenderers. They should ask all tenderers to quote on the same quantities so that they can be compared.
  - Many tender documents require the tenderer to submit their own plan of how to complete the work. This flies in the face of common sense and is unethical. What is really being asked for is a free consultation. Tender documents/specifications must reflect well founded, long term, ecological principals i.e. a plan of management. A contractor CANNOT provide a BEST PRACTICE regeneration plan without all the facts, especially with limited lead time and absolutely no budget to write the tender response. The contract manager should know exactly what they want, and the tender specifications and the bill of quantities should concur with that. Professional contractors have always been helpful and will undoubtedly discuss management options with clients, but they should only be asked to provide professional advice after they have been engaged.
  - The type /quality of the material needs to be clearly defined. This is an aspect of most contracts which is causing contractors serious concern. The ubiquitous problem is that contracts rarely allow for a difference in the type of labour provided and rarely allow for the contractor to bill the client for cost of writing reports. A good contract must allow the contractor to bill the client for the time of staff undertaking different functions e.g. chain sawing, herbicide spraying or report writing which the client requires and the charge out rate should reflect the professional experience required to: undertake field surveys, manage a contract, manage staff records, work health and safety, plan the project, produce high quality maps and reports etc. etc. The reason why contractors cannot hold the best staff for long and why the industry ultimately loses its work force and work quality and is diminished, is that supervisors are not charged out a rate which reflects their real skill and value.
  - Some tender documents require staff to be provided in teams of set sizes, say 4 people. These teams are often too small to take advantage of appropriate economies of scale and the required variety of skill and physical capacity. Being prescriptive in this way denies the contractor the flexibility to put the right people on the ground. The work may be completed more efficiently and cheaper with more or fewer people. Although this set team size type of contract can be applied to Schedule of Rates, it cannot be applied to Lump Sum contracts because the contractor always has the right to undertake the works with the resources they want to apply to the task.
  - Tender documents should require the submission of company and staff experience. This can be very experience specific, however it should not be person-specific. Employers cannot enslave staff to work for them, so clients should not determine the outcome of a tender on the engagement of a specific person but on the demonstrable discrete experience of the staff put forward. Cosy relationships between contractors and clients are the reasons why procurement protocols are legally required.
  - Councils often try to reduce their costs by supplying materials which should be part of the contractor's responsibility. Too many times mulch supplied by clients is the wrong type, delivered in the wrong size load on the wrong date and to the wrong place. The contractor is expected to pay the financial cost of rectifying this without complaint. Plants are not delivered, are not grown in time or are of poor quality, and the client still expects the contractor to pay to replace the plants that fail and re-water plants that were delivered early or late. If contractors are expected to accept delivery of other people's materials then they should be able to demand high quality and timely, accurate supply. Ideally, they should be engaged to supply the materials and be paid a fair margin for the service. In this way the client can demand the quality they require, and contractors are not put in a compromised position.
  - Contract variations should really be in writing and signed off by both parties before the variation is started. Pressure to complete variation works prior to them being included in the contract, leaves the contractor in a vulnerable position and creates uncertainty and potential mis-interpretation. It also creates an unequal relationship between contractor and client and consequent resentment.
  - The second element (consideration) when viewed through the lens of the 5th element, "certainty", is also vexed in that the undertaking of the contractor must be certain and clearly defined.
  - In a Lump Sum contract the specification should determine the overall volume (how much) must be completed when and how. In return the contractor is paid an agreed sum if he/she completes the amount of work within the agreed time and to the described standard.
  - In a Schedule of Rates contract, the specification only requires the provision of an incremental unit rate and generally this is required to be provided within a certain time frame and to an agreed standard. There is no obligation for the contractor to complete an agreed volume of work but rather to supply a unit of work at an agreed rate. In the bush regeneration industry, the contractor is generally paid for the unit labour hour or number of plants planted or cubic metres of mulch installed. There is no obligation for either party to pay for or provide a certain number of units.
  - The tender documents should provide precise knowledge to all tenderers of the weighting that the client is applying to the contract. It is unfair to new contractors who are not experienced with a client to be guessing what the client values. Transparency is everything in the tender process. Clients have and will continue to tweak the weighting of discrete elements in favour of their preferred suppliers.
  - The information that has been made available to past contractors should also be available to new contractors, past reports that explain the bushland condition and hours of work completed in management zones should be available to all tenderers. This is a reiteration of the need for standardised reporting formats and data collection and a re-leveling of the procurement ground.
- 3. Capacity to enter legal relations — e.g. of sound mind and legal age.**
- The major point here that is often misunderstood is that the site supervisor / manager cannot be assumed by the client to have the authority to vary a contract.
  - If the employee does not have the express written permission to act on behalf of their employer, then it should not be

assumed that they do. Accordingly, a good contract will expressly state who has the power to act on behalf of the contracted parties.

#### **4. Intention by the parties to enter into legal relations — private non-commercial agreements between family members may not indicate intention to enter a legally binding contract and therefore may not be enforceable.**

- This is generally ok in most contracts.

#### **5. Certainty — the contract must be complete, certain, clear and binding.**

- Client contract managers and contractors must be legally trained to comprehend their obligations and authority within the contract. A well trained and better paid contact manager may cost more but will generally provide better ecological results, value for money and legal certainty. They are also more likely to remain in their role longer which reinforces all those same benefits.
- The first four contract elements are straight forward however most of the thousands of contracts I have signed with councils would likely have failed if disputed because they are not clear or certain. The single most common failure is that the contract manager working for council and, in turn the procurement section at council, has not clearly established the 'nature' of the contract i.e. is it Lump Sum or Schedule of Rates.
- A Schedule of Rates contract generally does not require clear definition of the site but should be very clear in the type of work. For example, a "bush regeneration" labour hour should not be assumed to include felling trees, broad (motorised) spraying, or report writing.
- A Schedule of Rates may include a rate for writing an annual report or a rate per hour for writing other reports. Distinctions like this must be clear. Misunderstandings based on poor definitions can be very destructive to good working relations. It is the responsibility of the contract manager to provide this clarity in the tender document and it is the responsibility of the tenderer to be clear in the assumptions and exclusions they make in their tender response.
- Contracts can be varied, either in a manner agreed to in the original contract or agreed to by mutual consent after the contract has been signed. Varying contracts is easy for Schedule of Rates contracts by increasing or decreasing the number of units to be supplied, regardless of what the indicative budget is in the tender. A Schedule of Rates contract with a value of \$x does not commit the client to spending the entire budget.
- Lump sum contracts are generally varied by an upfront clause that establishes a Schedule of Rates within the main contract terms. For example, the main contract could require the regeneration of 10 hectares of bushland and the main contract also have a schedule within which the contractor agreed to provide extra regeneration at say \$1,000/1,000 square metres of bushland. If the principal has reason to increase the scope to 11 hectares mid-contract, then he could require the contractor to regenerate an additional 10 units of 1,000 metres of bushland and he would purchase an extra 10 of these units at the agreed rate. This contract is still a Lump Sum because it cannot be substantially altered by use of the Schedule of Rates. If the principal attempted to reduce the scope of work by say 50%, the contractor could refuse because the substantial increase or reduction in the scope would undermine the financial foundation of the contractors undertaking.

## **Schedule of Rates**

### **The benefits of a Schedule of Rates contract**

- Contractors can be swapped easily.
- Expedience — they require very little planning to prepare and are thereby cheap.
- They are fast to prepare and suited to urgent/emergency works.
- Untrained staff can prepare them and manage them.
- They can be varied easily as they do not require a fixed budget.
- They can be easily compared and are generally weighted in favour of the cheapest price tendered.
- They do not require precise Key Performance Indicator (KPI) auditing by the contract manager. Generally, the contractor is left to determine the efficacy of their own work — colour coding (not weed / native density mapping based on transects and standardised plot analysis) — a bit dodge one might say.

### **The disadvantages of a Schedule of Rates contract**

- They do not require planning and may not result in the best outcomes.
- They perpetuate the mistakes of the past, poorly planned projects (e.g. volunteer lead) and are not easily stopped without solid scientific reasoning to redirect funds to projects with better ecological outcomes.
- They do not generally have the same auditing rigor (poor planning, poor KPIs ) and so do not have the scientific data to back adaptive management decisions.
- Contractors must be watched like hawks to ensure that they provide the number of hours they claim. A team of 6 starting 15 minutes late or a ghost worker can cost a large contract tens of thousands of dollars.
- They generally lead to the engagement of the cheapest contractors. Cheap contractors may be fully resourced, but that is unlikely. More expensive contractors have well maintained vehicles, have fully developed EMS, WHS and Quality Assurance systems. They employ better paid and better qualified staff. I have heard many clients complain that a \$50.00 charge out rate is high. They may be higher than some in the industry, but compared to other industries regeneration contractors are dirt cheap.
- Engaging the cheap contractor has resulted in the loss of highly qualified, hard working and vocationally driven experts and could lead to the demise of the bush regeneration industry.
- If a contract manager applies a Schedule of Rates contract there is no guarantee that the assumed work rate will be achieved. As a result, planning and budgeting is undermined.
- The client cannot force the contractor to complete a set task if they are paid for the provision of an hour of work. Bush regeneration Schedule of Rates contracts are, to all intents and purposes, a labour hire contract.
- Clients who prepare their tenders as Schedules of Rates contracts and then manage them as Lump Sum contracts are either ignorant of their legal status or acting unethically.
- Site attendance is generally at a set period and is not programmed in response to site conditions.

## Lump sum

### The benefits of a Lump sum Contract

- They require better qualified and more experienced staff to manage them.
- They are well planned and outcome driven.
- Measurable and achievable outcomes are set up-front.
- They can be better staged to align with funding periods.
- They are judged as achieving better defined outcomes and are more reliable for long term funding applications.
- If a contract manager applies a Lump Sum contract, there is a guarantee that the work outcomes will be achieved and the risk to the client is removed.
- Independent monitoring of KPIs proves performance and provides the authority to pay contractor claims.
- The most important benefit is that workers on ground can be rewarded for working harder. This is an under-rated aspect of the Lump Sum contract. I have staff who will work hard and install 500 tubes in a day at normal bush regeneration hourly rates. If I apply a piece rate (a mini Lump Sum) they will double their output. Clients share in that increased output when they use Lump Sum contracts.
- Performance targets drive innovative and more efficient approaches to bush regeneration.
- Better paid staff means more experienced people in the industry, which flows on into better, and arguably cheaper, results.
- Tenders written in response to well-prepared documents can be very accurately compared.
- Contractors who are inexperienced or unrealistic can be weeded out at the tendering time because their estimates are usually outside the bell curve of price.
- Poor contractors fail to complete contracts and leave the industry.
- The contractor has an incentive to plan their work in response to site conditions, not just turn up periodically.
- They are better suited to applying standardised industry ecological planning tools.
- They are better suited to applying standardised industry ecological outcome auditing, which in turn can be shared by all land managers.
- They are better suited to applying standardised industry tendering documents.
- They facilitate the smooth transition of staff between client and contractor organisations.
- A stronger case can be made by contract managers to their superiors/accountants to apply resources for projects to achieve ecological outcomes rather than political outcomes.

### *What's your experience as a contractor or contract manager?*

As a **bush regeneration contractor**, do you have similar experiences? Are things different in other locations i.e. is this peculiar to NSW?

Or are you a **contract manager** and someone who is selecting contractors for an organisation. Are contracts through the organisation/council, subject to other factors and restrictions, that contractors might not be aware of?

Tell us your story. Email Louise at [newsletter@aabr.org.au](mailto:newsletter@aabr.org.au)

### The disadvantages of a Lump Sum Contract

- They require more expensive planning up front.
- They cost more for staff to manage them.
- They require more expense in software and on-line service contracts (e.g. Nearmaps).
- The cost of independent auditing is higher (but would be recovered by efficiency gains).

### In Summary

Long term management plans must be used to guide work programs.

If a contract manager has an accurate resource inventory and has monitored the progress of their long-term projects then they can determine the amount of work required over an average year and how fast weeding / planting / mulching can be done without burning bush regenerators out and without them underperforming. In short, the contract manager can apply a budget and can reasonably expect a contractor to complete this work within that budget.

When a contractor commits to a Lump Sum contract they undertake weed density mapping, weed species determination and they write an eradication plan which is overlying an anticipated bush regeneration response. That is, they write a short/midterm plan of management. I make this point because some land managers claim that the budget cannot be determined because the work effort required cannot be accurately determined until the ecological response to regeneration works occurs. The industry has enough experience now to know what will occur within a reasonable level of accuracy. Contractors are prepared to estimate the likely outcome and risk that their assessment is reasonable. Professional bush regeneration contractors working for government agencies currently commit to loosely defined performance-based outcomes and generally (THE ETHICAL ONES) complete these contracts without harming the bush.

The practice of preparing Schedule of Rates contracts and then managing them as Lump Sum Contracts must stop. Contractors should not be expected to put themselves at risk if clients are not prepared to pay the reward for that risk.

The bush regeneration industry is drowning in mediocrity. Schedule of Rates contracts have their place, but it is very limited. Contract regenerators and their staff can only improve their service if clients provide long term planning, legally equitable and financially rewarding contracts which provide for the resources that clients are continually expecting from contractors.

In 1991 when many councils and government agencies were starting their regeneration programs using a competitive tender process, the employment expenses represented about 69.66 % of the charge out rate. Today that has risen to about 71% of the charge out rate. However, clients now require contractors to provide fully implemented and maintained integrated management systems, serviced cars and machinery, PPE and communications, and in many cases complete reports for free.

Most industry sectors apply a factor of at least double their employment expenses to cover all business expenses, ie employment expenses are half their running costs. Our charge out rate should be \$65.00 pre GST. The difference in the rate reflects the reduction in the skill and the service that has degraded the bush regeneration industry.

Which is what the landscaping industry is.

Currently the only way to save our industry from imploding is to implement Lump Sum contracts which provide our staff and contractors with the opportunity to benefit by hard work.

# The "Roundup" Rant.

There is a lot of talk about glyphosate herbicide. ABC's *Four Corner's* program on the Mon 8 Oct 2018 entitled the *Monsanto Papers*, described the secret tactics used by global chemical giant Monsanto, to protect its billion-dollar business and its star product, the weed killer, Roundup. Kate Hughes responded on LinkedIn - published on October 9, 2018

## Kate Hughes

ABC's *Four Corner's* program this week was about a health risk posed by the herbicide *Roundup*. The program was predictable in its content and disappointing in its scope. That said, it did shed light on the scientific debate regarding the cancer risk associated with exposure to glyphosate, the active constituent of *Roundup*. The problem was that the program framed the narrative around carcinogenicity and high exposure situations, neglecting the more likely health risks presented by the presence of glyphosate residues in food.

Let's unpack this a little. When a court in California recently awarded Dwayne Johnson US\$289 million in damages, it did so on the grounds that his lymphatic cancer was caused by exposure to glyphosate-based herbicides. In the *Four Corner's* program, the industry spokesperson who contested this ruling did so on the basis that "the science did not resonate with the jury", implying that reference to the right sort of science would show that there is no cancer risk.

So is it a case of just "my science" against "your science", my expert against yours? Well yes, in one sense it is, but science can never prove conclusively that no risk exists. It's just the way scientific proof works. When considering evidence of cancer risk, regulatory agencies world-wide have to make judgement calls so that pesticide products can be either approved or not approved. In the case of weed killers containing glyphosate, there is a lack of scientific consensus about the risks they pose to users. The International Agency for Research on Cancer differs in its approach to cancer risk assessment to say, the US EPA. It's a well-known long-standing debate between toxicologists and epidemiologists about how to best assess cancer risk. However, increasingly, many experts prefer a focus on other health risks, including impacts, say on the immune or endocrine systems.

So how do regulatory agencies strike that balance between competing scientific evidence. *Four Corners* pointed to the strength of the pesticide industry lobby in the US, and its claim for "strong advocacy" rather than "interference". What the situation is like in Australia is less clear, but it is worth remembering that years ago, the popular television garden show host Don Burke was confident enough to state publically that glyphosate-based products were completely safe. Why do I know this? Well I saw it on television and remember feeling very unsettled about what I was confident was a misleading claim. Today, I remain opposed to the use of glyphosate by the public and its use on food crops. For me, this is where the real risk lies. ....not so much for the

## Want to be on the AABR committee?

AABR's committee has been 'consistently active' over the decades, enjoying the input of some longer-serving members and many others who have brought their skills to the group for shorter periods or non-consecutive terms. e.g. skills of contractors, teachers, planners, volunteer regenerators etc.

AABR encourages members to be actively involved and welcomes people who would like to join the committee. It's easy! This year the full committee met once every two months by conference call. The use of conference call means that the committee members are from widespread locations. We have members from coastal NSW, Sydney, Queensland and South Australia.

farmers who can protect themselves against exposure, but for the health of the natural world, including impacts on non-target species and the well-recognised problem of weed resistance to glyphosate. There can be no credible scientific argument about the currency of these issues: They are very real, but let's return to the human health issue. Think for a minute about the food residue issue. If people consume food with glyphosate residues, what happens? I'd like some answers from Australian regulators here, since it is logical that such residues, once in the gut, could, and probably do, destroy the gut flora that are essential for the processing of food. Surely this is a real risk that regulators should be concerned about.

Now before I go, I must confess my support for glyphosate when used by trained operators in bush regeneration. The poison is applied directly to target weeds which pose huge risks to the integrity of our natural environment, and some like, *Tree of Heaven* and *Cestrum*, also to human health. So let's frame the debate in terms of risks and benefits, and take the moral high ground away from well-meaning people who would rather see all commercial herbicides banned than see them used to address a greater risk of massive weed infestation. But most of all let's take the moral high ground from the pesticide industry who deceitfully argue that pesticides enable food production to feed a hungry world, arguing as they did in *Four Corners* that they "believe in sound science". We can only hope that the Australian regulatory response is based on just that. Then we might see the glyphosate health risk issue within the wider frame, where cancer is just one of a number of risks presented, and where risks to the natural environment are considered equally important.

I welcome comments about the risks and benefits of using herbicides, not because I approve of them but because in certain situations, they are necessary to protect biodiversity in the Australian environment.

See Kate's article in a previous AABR Newsletter #128.

[www.aabr.org.au/images/stories/resources/newsletters/AABR\\_News\\_128.pdf](http://www.aabr.org.au/images/stories/resources/newsletters/AABR_News_128.pdf)

Kate Hughes is a resident of the Macdonald Valley and Author of "Quick Poison, Slow Poison. Pesticide Risk in the Lucky Country". She is a writer, researcher and advocate with a focus on hazardous chemicals and their remediation

The ABC's Science Show on 20th October 2018 had further discussion on this glyphosate. To listen or read the transcript go to <https://www.abc.net.au/radionational/programs/scienceshow/glyphosate-one-of-the-safest-farm-chemicals---ben-selinger/10396230>

There are many plans for the upcoming year including ;

- Hosting a contractors forum to educate both those managing bush regeneration contracts and those bidding for contracts - to better optimise the use of limited ecological restoration and management budgets
- Developing a business plan to sustain *regenTV* into the future
- Promoting and expanding the accreditation program and
- Hosting events and field trips.

The AGM is on Saturday 17/11/18, 10am-noon, Maiden Theatre, Royal Botanic Gardens Sydney. The [agenda](#) is on our website. If you cannot attend, [nomination forms](#) are also on the website.

If you'd like to discuss joining the committee, contact Tein [president@aabr.org.au](mailto:president@aabr.org.au) or Jane [secretary@aabr.org.au](mailto:secretary@aabr.org.au).

# Exotic or Local?

**Meron Wilson**

There are more than three thousand introduced plant species that now call Australia home. The result is that our native ecosystems are being permanently altered. In some systems introduced plants out-compete native species and can cause local extinctions. In other systems, introduced plants can actually increase biodiversity. Some introduced plants are spectacularly bad, and some just quietly co-exist. But all of them are changing our ecosystems and in the process they are also changing themselves.

Claire Brandenburger at the Ecology & Evolution Research Centre of UNSW has been studying a coastal daisy (*Arctotheca populifolia*) introduced from South Africa in the 1930s, and can be found growing in three locations along the east coast of NSW. Her aim was to determine how the characteristics of the plant changed as it adapted to cope with its new environment. She was fortunate in being able to identify the exact source of the first introduction, a rare find in herbarium records, and so could make accurate comparisons.

After years of comparing the plants under controlled conditions Brandenburger identified differences in nearly every aspect of its biology - leaf shape and texture, flower and plant size, and reproduction strategies - that have developed in the eighty odd years it has been here.



Characteristic	Source plant	Australian plant
Form	Upright	Longer and sprawling
Leaf texture	Hairs on both sides	50% hairier underneath
Leaf shape	Distinct adult shape	Leaves retain juvenile shape
Floral rays	Many large rays	Few small rays
Seed	Few	Many
Self pollinating	No	Yes
Flowering time	Late spring	Early spring

Brandenburger found reasonable explanations for all the variations. In Australia the plant has to cope with continual sand burial, so grows a long and sprawling body to keep reaching the sunlight. Extra hairs on the underside of the Australian plant leaves help reduce evapotranspiration in the drier conditions. The loss of adult leaf shape has been shown to occur in other plants by switching off just one gene. The changes in characteristics relating to reproduction result from a lack of pollinators in Australia - smaller flowers have now evolved to make their own seeds.

The factors for allopathic speciation (ie that determine a new species) are present: morphological differences, physiological differences adapted to local conditions, and geographic and reproductive isolation. The differences in flowering times means the two forms are now unlikely to cross pollinate. Even when they do, their offspring have compromised germination rates. Another year of collecting evidence is needed to determine if a new species has evolved.

It only takes a hundred or so generations for genetic variation to occur. That is 100 years for annuals like daisies, less for grasses like Ehrharta that can set seed several times a year. So what does this mean? Is this now an Australian plant? Do we have a suite of new Australian species that should be protected rather than pursued?? Ayayay!



The photo above shows the two variations. Daisy source plant is on the left and the Australian variation on the right

## Looking for permethrin treated clothing?

Lyndy Rees has a small selection of permethrin treated clothing still available in limited sizes.

email Lyndy for a list. [Safarilifeclimbing@gmail.com](mailto:Safarilifeclimbing@gmail.com)

or send a text on 0427 023 021

# Books

## A Guide to Native Bees on Australia

Terry Houston

An illustrated introduction to the estimated 2000 species of Australian bees.

This is a long awaited book by Terry Houston who is considered one of Australia's great native bee experts. Once you discover native bees, you'll suddenly see them everywhere showing off their diverse appearance and how they use diverse habitats.

*A Guide to Native Bees of Australia* provides a detailed introduction to the estimated 2000 species of Australian bees. Illustrated with stunning photographs, it describes the form and function of bees, their life-cycle stages, nest architecture, sociality and relationships with plants.

The book contains systematic accounts of the five families and 58 genera of Australian bees. Photomicrographs of morphological characters and identification keys allow identification of bees to genus level.

The information is easily accessible and the book would be of interest and an essential guide for anyone interested in native bees.

Paperback | August 2018 | \$ 49.99

ISBN: 9781486304066 | 280 pages | 215 x 148 mm

Publisher: CSIRO Publishing

ePDF | ISBN: 9781486304073. Available from eRetailers



## A GUIDE TO NATIVE BEES OF AUSTRALIA

TERRY HOUSTON

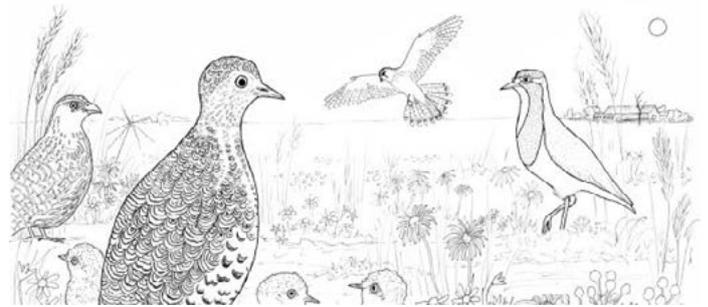


## Free Riverina Grasslands colouring book to download

Paula Peters has created a colouring book which is the result of a project commissioned by OEH, NSW. The book is free for you to download. Found at her website <https://www.paperbarkwriter.com/>

*'Two summers ago I set off to the Hay Plain in southern New South Wales to explore and draw the remarkable Plains-Wanderer and its grassland habitat. Ray and I stayed in the old homestead at Oolambeyan National Park while I did the preliminary work for the Riverina Grassland Ramblings colouring book. I wrote about the old homestead in The ghosts of Oolambeyan, and of my process for making the colouring book in How to draw a grassland Part One, Part two: Ecology in pictures and Part three: What lies beneath?'*

*Riverina Grassland Ramblings was commissioned by Matt Cameron of the Office of Environment and Heritage, New South Wales. Matt saw the value in using the colouring book format to communicate the wonders of this grassland ecosystem, and also how it could be managed for wildlife and sheep production at the same time. Of especial importance is the protection of the Plains-Wanderer, a small but remarkable bird that is threatened with extinction. Riverina*



The Plains-Wanderer and friends, on a sheep station somewhere in the Riverina.

*Grassland Ramblings is currently being distributed to landholders as part of a Plains-Wanderer stewardship program.'*

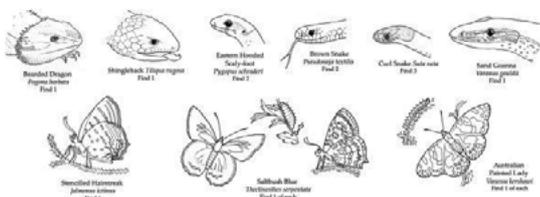
As the project was a government contract, it is not for sale, but after many requests for a copy the electronic version can be downloaded.

Go to the link below, enter your email address and download the PDF. ....and start colouring.

The book can be used as a find-it book too: An illustrated index in the back lists all of the plant and animal species illustrated, and how many you need to find. Happy Ramblings!

Riverina Grassland Ramblings (2016) illustrated by P Peeters (PDF 46 MB)

Other books by Paula can be found as <https://www.paperbarkwriter.com/projects/>



Part of the illustrated index to species at the back of the book.

# Curing Bell Miner Associated Dieback – success at Creek's Bend

Susan and Wayne Somerville own and manage 'Creek's Bend' a property in the Toonumbar area west of Lismore in north-eastern NSW.

On Creek's Bend, in the 1970s, the forests in that area had little lantana and the native honeyeater bell miner (*Manorina melanophrys*) was present but not widespread. However, by the 1990s, due mainly to previous logging disturbance, much of the forest understorey had been replaced by lantana and bell miners were common throughout most of the forest. Other birds were scarce; tree canopies were shrinking, and some trees were dead. This became known as Bell Miner Associated Dieback (BMAD). This scenario is repeated across large tracts of forest ecosystems

in eastern Australia

The Somerville's began a program of lantana removal and restoration of the forest which has seen a reduction in bell miner numbers. Now Wayne and Sue have produced a video which describes the effects of the lantana, explains how the dieback results and how they have worked on their property to cure this problem.

This half hour video is well worth watching. Towards the end there is an important message for those who may be finding it difficult to reconcile the use of herbicides with an environmentally sensitive philosophy.

The video is found on youtube at <https://www.youtube.com/watch?v=s4ziNkKPESU&feature=youtu.be>



Lantana after treatment with glyphosate using a splatter gun, on the Somerville's property. Photo: W Somerville

## Tackling Cats Claw Creeper

New video demonstrates a control project in South-East Queensland

Healthy Land and Water is an independent organisation working to improve the sustainable use of land and waterways in South-East Queensland. The organisation was officially launched in 2017 and is the combination of SEQ Catchments and Healthy Waterways. For more information about Healthy Land and Water and their projects go to <http://hlw.org.au/>

Healthy Land and Water has teamed with Seqwater to tackle the invasive cat's claw creeper weed in South East Queensland.

Seqwater's Riparian Weed Control Program is a \$6.4 million project to tackle the notorious cat's claw creeper weed which has infiltrated many of South East Queensland's catchments.

Learn more about the work they doing by watching this video.

<https://youtu.be/2B9KrijL4G4>

## Save Kosci Walk

For those who oppose protecting feral horses in Kosciuszko National Park and enjoy walking.

The walk starts in Sydney on 3rd November 2018, and walkers are expected to reach the summit of Mt Kosciuszko by about 9th December. You can join part or all of the walk.

The goal is to garner public support to repeal the *Kosciuszko Wild Horse Heritage Act 2018* and protect the irreplaceable natural heritage of the park from the damage caused by feral horses.

The Heritage Act, passed in June by the NSW parliament, requires park managers to protect horses for their 'heritage value', thus prioritising a destructive invasive species over all the native species threatened by horses.

The walk is organised by a group of bushwalkers who are alarmed by the increase in horse damage seen in Kosciuszko.

Find out more and register for the walk at <https://savekosci.org/>

**Note:** The *Ecological Management and Restoration* journal will have a special section in the January 2019 issue on this topic.

# What's happening

**Monday 12th November -  
Friday 16th November 2018**

## **12th Australasian Plant Conservation Conference (APCC12) 2018**

The ANPC is delighted to announce that APCC12 will be hosted by the Centre for Australian National Biodiversity Research (CANBR) at CSIRO, and will be held at CSIRO Discovery at the Black Mountain Science and Innovation Park, Canberra.

See Page 14.

More details on APCC12 will be provided in the near future, so stay tuned!

ANPC members receive discounts on the conference registration fees!

<http://www.anpc.asn.au/conferences/2018>



**APCC 12**  
12th Australasian Plant  
Conservation Conference 2018

### **Friends of Grasslands**

For a whole swag of interesting events, check out the FoG calendar.

Friends of Grasslands is a community group dedicated to the conservation of natural temperate grassy ecosystems in south-eastern Australia. FoG advocates, educates and advises on matters to do with the conservation of grassy ecosystems, and carries out surveys and other on-ground work. FoG is based in Canberra and holds a number of events and activities

[www.fog.org.au/](http://www.fog.org.au/)

**Wednesday 12th December**

### **Fauna Spotting, ID and Forensics**

A workshop run by Greening Australia In Brisbane.

Gain an understanding of the processes, skills, equipment and requirements used in locating, identifying and dealing with wildlife in pre-clearing assessments, rescue and relocation operations and other spotter catcher activities. Participants will also gain familiarity with the legislation, codes of practice and risks management when working around wildlife.

Wed, 12 Dec **9:00am - 3:00pm**

Location **333 Bennetts Road, Norman Park, Brisbane, QLD** [View map](#)

Cost \$352 / person - includes GST

[View Brochure](#)

<https://www.greeningaustralia.org.au/training-and-events/>

**Monday 18th - Thursday  
21st February 2019**

### **Conference: Eucalypt genetics: fundamental and applied research in a post-genome era**

University of Tasmania, Hobart, Australia

It is 20 years since the first Molecular Genetics of Eucalyptus symposium held in Hobart. Enormous advances in this field have occurred, including the publication of the eucalypt reference genome in 2014.

The conference will bring together researchers and aims to i) review the national and international advances since the reference genome project was completed, ii) identify future research challenges and foster a coordinated approach to develop new genomic resources, and iii) channel advances to benefit the conservation and utilisation of eucalypts.

This four-day conference will include talks, posters and a field trip

The conference is hosted by the Eucalypt Genetics Group and the ARC Training Centre for Forest Value at the University of Tasmania.

<https://www.eucalyptgenetics2019.com.au/>

**Running from January to  
mid-March 2019**

### **Monster Mouse-ear Hunt**

The 'Monster Mouse-ear Hunt' is a volunteer program supporting the eradication of a noxious weed in **Kosciuszko National Park**. Mouse-ear hawkweed (*Hieracium pilosella*) was first detected on the Main Range in Kosciuszko National Park in December 2015.

It poses a major threat to the Australian Alps. The National Parks and Wildlife Service (NPWS) is committed to eradicating mouse-ear hawkweed.

Volunteers have been instrumental in protecting sensitive environments from the hawkweed invasion, by helping to find plants during the summer season. This season, NPWS will conduct three and a half day surveys that coincide with peak mouse-ear hawkweed growth.

A high level of physical fitness is needed as surveys require a lot of walking.

Bookings are essential. NPWS Khancoban (02) 6076 9373 or Tumut (02) 6947 7000

<https://www.environment.nsw.gov.au/topics/animals-and-plants/pest-animals-and-weeds/weeds/new-and-emerging-weeds/mouse-ear-hawkweed>

## **Australian Association of Bush Regenerators**



### **President**

Tein McDonald [president@aabr.org.au](mailto:president@aabr.org.au)

### **Treasurer and Administration**

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### **Committee members**

Scott Meier, Ben Ford, Matthew Pearson, Agata Mitchell.

### **The Australian Association of Bush**

**Regenerators Inc (AABR)** was incorporated in NSW in 1986, and has several hundred members from all over Australia. AABR is pronounced 'arbor'.

Our aim is to promote the study and practice of ecological restoration, and encourage effective management of natural areas.

**All interested people and organisations are welcome to join.** AABR members include bush regeneration professionals, volunteers, natural area managers, landowners, policy makers, contractors, consultants, nursery people, local, state and commonwealth government officers—and lots of people who just love the bush and want to see it conserved.

**AABR also offers accreditation** for experienced practitioners.

**AABR News** is usually published in January, April, July, and November.

### **Membership fees**

Individuals	\$30 (unwaged \$15)
Organisations ( <i>does not confer membership to individuals in the organisation</i> )	
• business (< 5 staff)	\$120
• business (5-20 staff)	\$300
• business (> 20 staff)	\$480
Government	\$60
Not for profit	\$30 ( <i>or \$0 with newsletter exchange</i> )

### **Benefits of Membership:**

- discount admission to all AABR events
- four newsletters per year
- increased job opportunities
- discount subscription to the journal Ecological Management & Restoration
- opportunities to network with others involved in natural area restoration
- helping AABR to be a strong and effective force to promote natural area restoration, and support the industry.

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### **Newsletter contributions and comments are welcome**

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*Opinions expressed in this newsletter are not necessarily those of AABR*